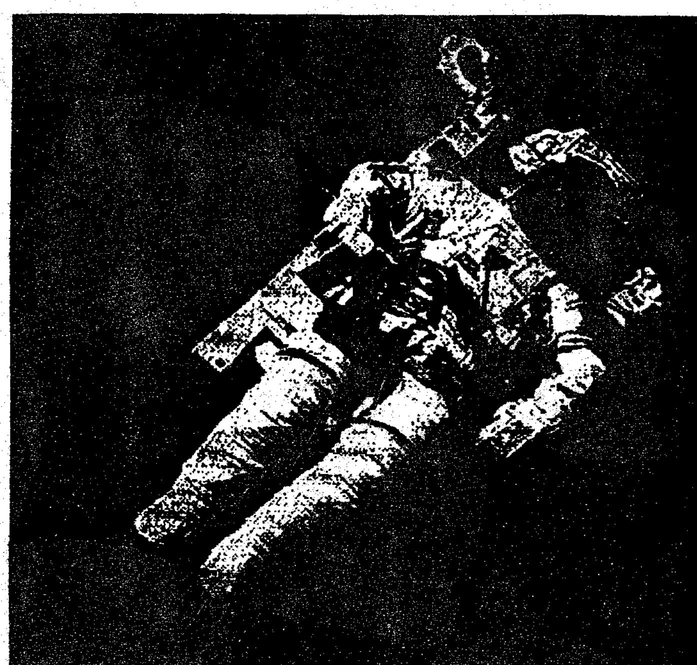
4BBOC

The LIAUG Lighthouse

The newsletter of the Long Island Atari User Group

June 1990
Volume 6 No 5



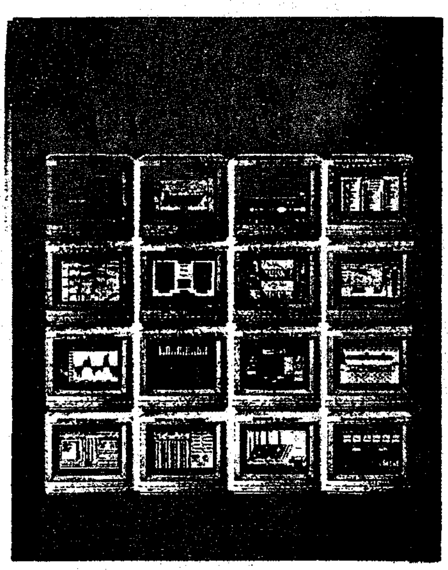
Long Island Atari User Group

P.O. Box 92
Islip, NY 11751
BBS Phone # (516) 221-8462

"Technically, the Atari ST handles MIDI timing better than the others. Musically, it has a great feel."

"When I went to purchase a computer, I talked to several of the top studio drummers around Los Angeles who overdub on everybody's computer tracks. I asked them which computer felt the best to them. They all told me the Atari. Whatever the technical reasons, the Atari ST just handles MIDI timing better."

LEE RITENOUR



Call now for your free copy of "Musicians and the Atari ST." You'll learn about the complete line of ATARI computers, peripherals, and accessories (MIDI-ready — not modified like other computer products) including the new laptop Stacy for musicians on the go. Also included is a free listing of over 100 software applications designed for the ST — and you.

800 • 443 • 8020

ATARI® Atari Corporation Music Division P.O. Box 61657, Sunnyvale, CA 94088

UAUG

The Long Island **Atari** User Group and its newsletter. The LIAUG Lighthouse. are not affiliated with Atari Corporation or its affiliated companies other than being a recognized officialgroup. All references to Atari and Atari related products are the trademark of the associated companies.

The opinions expressed in this publication are not necessarily those of LIAUG but rather of the individual authors. LIAUG cannot be held responsible for errors of any kind appearing in this publication.

Any material published in this newsletter may **be** freely copied and reprinted, provided that the individual authors and LIAUG are given due credit, unless otherwise marked or copyrighted.

LIAUG is a non–profit organization. We will not tolerate any references to piracy either implied or direct or the use of home computers for illegal activities.

ADVERTISING RATES

Business Card	$ 5.00
114 Page	10.00
112 Page..	20.00
Full Page	30.00

Rates are per **issue** –camera ready copy only Consecutive ads placed at the same time receive a **10% discount** per issue with a **30%** maximum. Send ads to our regular mailing address

Directions to the library: **From** the **Long** Island Expressway: Take exit 58 North (Old Nichols Road). **continue** north for approximately two miles and make a kft (west) turn onto Smithtown Blvd **Continue west** for 1 112 miles to the **Nesconset Plaza** on the right hand side of the road. The **library** is located in the wed end of the **plaza.**

From The Northern **State Parkway:** Take the Northern to the end where it continues east as Veterans **Memorial/Nesconset** Highway **(routes 347/454).** Go east approximately two miles and toke the left fork **(347).** Continue **for** another three miles to Terry Road. Make a right turn onto Terry **Road** and take **the** left fork **(approximately 3/4** mile) onto Smithtown Blvd. The **library** will be in the **Nesconset** Plaza on the left hand side approximately one mile from the fork. Meetings are open to all those interested at no charge. The meetings begin at **12:00 p.m.** in the library 's community room **and** end at **4:00 p.m.**

Current LIAUG Officers

President	John L Aalto, Jr
Secretary	Joy Sanderson
Treasurer..	Randy **Constan**
Librarian 8 bit	George Leek
Librarian 16 bit	Harvey **Schoen**
BBS Sysop	Patrick J. Mulvey
Club Correspondent..	Terrence Madden
Int'l correspondent..	Horst **DeWitz**
Newsletter Editor	Harvey **Schoen**
8 Bit Program Manager	Pat Mulvey
16 Bit **Program** Manager	Terrence Madden

Club Meetings

The Long Island Atari User Group Meets once a month at the Nesconset branch of the Smithtown Library. Membership dues are $20 per year and **ent;itles** you to receive the newsletter.

The newsletter is currently being produced on a **520ST** with lmbyte memory and a **20mbyte** hard drive. Software is Timeworks Desktop Publisher.

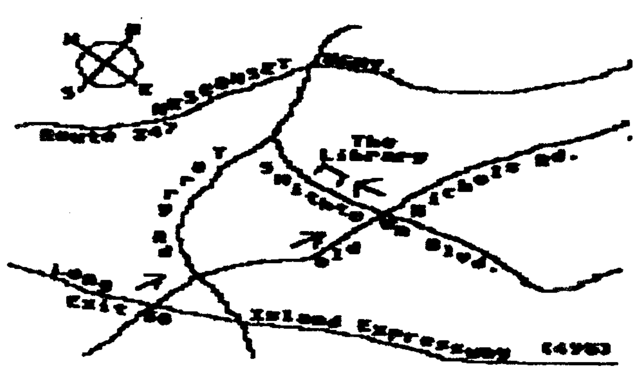
If you have any questions or comments about The Lighthouse or LIAUG, please write to our mailing address or **post** on our BBS.

Ow address is:

LIAUG
P.O. Box 92 **Islip** NY 11751

Our BBS number is: **(516)** 221-8462

If no answer call: **(516)** 221–2964 and leave a message.



MINI MIDI LESSONS

Continued from May issue

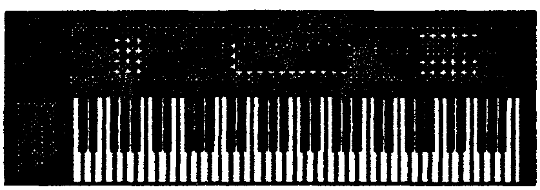
#6

WHAT DOES MIDI *COST* ?

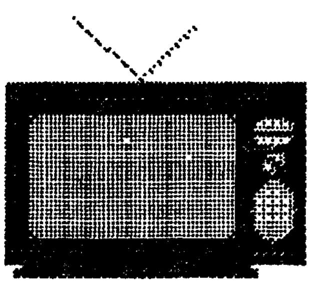
Like watches. MIDI can cost as little or as much as you want to put into it. I can give you some price ranges. but they are arbitrary. I can give you some recommendations, but they are generalities. You will dill have to evaluate for your application and make the final decisions.

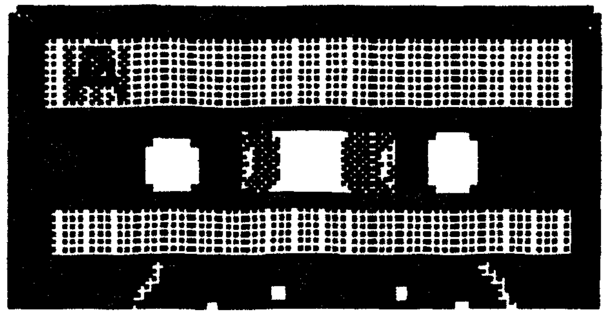
The three basic components. aside from the computer. are the sequencer (software), keyboard and synthesizers, and the music sound system. The first two are most urgent to this discussion.

A starter sequencer is available from the public domain for most popular computers. I recommend starting with one, even though I did not. This allows you to find and settle on a keyboatd first. Most vendors provide low-end versions of their sequencers starting in the 530 to $60 range. The high-end versions of the same programs will be from 5300 to $700. Accessories can cost up to an additional 5500, costing $20 to $100 for each added utility.

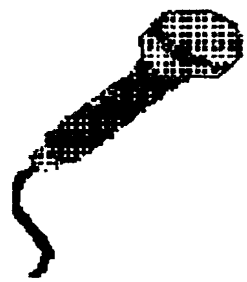


Software is expensive, but good programs are worth it. The low-end versions will not have all the features of the expensive versions, naturally, but will possibly have everything you need or want. Again. try them first.





Keyboard selection is more difficult. and should come first. As in a previous discussion. decide whether you need your emphasis on the keyboard or the synthesizer. Don't be carried away by the "local" features. such as rhythms, chords and fancy noises the keyboatd can make while you play it. Most of these things will not be recorded on the MIDI. However. if your daughter will enjoy playing it Iive, then consider it. New keyboards start about $130 and go to 53000 or more. Keep an eye on swap meets, yard sales. classified ads and pawn shops. Someone gets a good bargain every day, somewhere.



Not all keyboards give the same amount of information. If touch sensitivity (how fast and hard the key is pressed and released) is important. then keep it in mind. The difference 7 If the keyboard does not record how loud the note is performed, then it must be added in the editor. If the keyboatd does not respond to touch sensitivity. it is very probable the synthesizer in it also does not. That wuld be more important. Does it have input for foot pedals, modulation control. pitch bend (glide pitch while playing). or pan (stereo balance). Many keyboards and their synthesizers are only monophonic (one output. not stereo). Examine it carefully. Seek advice and help ifnecessary.

You can add the sound system and cassette recorder as anything from a simple AM/FM radio and cassette recorder to a grand home music system. It should be stereo. The rest I leave to your imagination.

Morris G. Miller

CRAZY-EIGHTS #10: Craig stops over

by Robert Buman ,&bit librarian for SAGE Spectrum Atari Group of Erie

It was a typical monday. I just sat down at my 130XE to do some library work. I was powering up: the lights on my disk drives had blinked on when my doorbell rang. It was as if they were wired together. When the lights went off and the doorbell rang again I was pretty sure it meant there was someone at my door pushing the button. Another typical monday. full of interruptions.

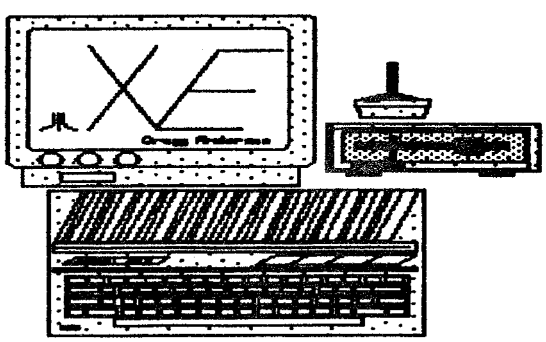
It was Craig; an on-again-off-again SAGE member and fair-weather friend. Usually 1 hear from Craig by phone, and almost always after 10 pm when my computing is all done for the night and I've just settled into bed or into a good movie. Or both. And when he says "I'll only keep you for a minute" it really means he has all night. Well, I think to myself, this is the night I devote time to dub stuff, so interruptions from club members should be expected... to a point!

On this particular monday I happened to be a little behind on readying next month's disk, so I was feeling a bit pinched for time. However, I hoped for the best as I went to answer the door.

"What took ya so long? Good thing it's not rainin' or I'd be drenched!" A typical Craig hello.

"You just caught me in the middle of copying disks– Hey. wanna help?"

"Nah, that's too boring. I just came over to check out an article in this month's ANALOG mag. You still get Analog?" He KNOWS I do.



"Yeah. I have the latest issue. C'mon in."

I give Craig the Analog mag to read but he's too busy nosing around my computer area. "You get kicked off that boat you were on?" He says. "Not kicked off" I answer, 'The guy wanted to use his boat... It IS summer, you know!"

'Oh. yeah,. are those paw-marks on your desk?"

"No, just marker-ink. I don't let my cats in this room."

"Did I say anything about your cats? Hey. by the way. some club-members asked me about some problems they were having with last month's disk. Have you looked into it yet?"

This catches me off-guard, because nobody talked to me about any problems. "What program?" I ask. "I don't remember." he responds. "There were some other disks mentioned. too. but I don't remember which ones"

"Well can you tell me who was having the problem? I'd be glad to call him"

"It was more than one person... I talk to so many people at the meetings, everybody trusts my expertise, you know."

"Yes, I know... you've told me many times!"

Then Craig mentions some other disk I released— and mind you, I don't WRITE these programs (with an occasional exception), I just scoop them together with other programs of similar types— and says "If I were librarian, I would have done it completely different. I would have made it a special disk with a special custom menu screen. Some modifications to the programs, too."

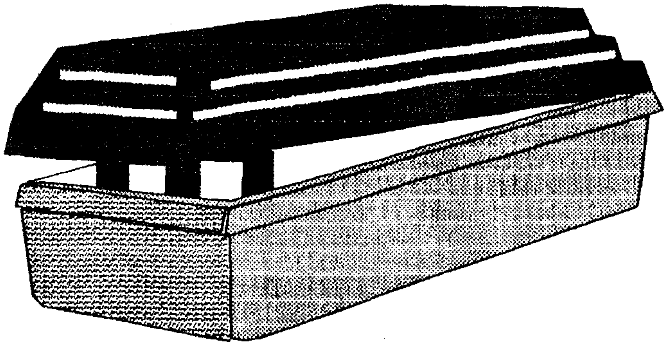
1 say "that sounds good. too" and leave it at that. because 1 know he won't go into detail on his personal ideas. That would be like giving away government secretsl So. I ask Craig if he has anything interesting to donate to the PD library. "I could have given you THIS-- I've had it lor a month" He was refering to one of the programs on the latest disk. I had heard about it for a while. but only recently found it on an out-of-town BBS.

"So why didn't you donate it a MONTH ago, Craig" I ask in vain.

"I've got all sorts of stuff. all sorts! I got disks and disks of stuff and I don't even know HALF of what 1 got. Maybe someday if I get it all organized. I'm still looking for a decent disk-library program."

I remind him of SAGE's own "SAGE*CAT" cataloging program. which. I must admit. I was the author of.

"Hmm" he says coldly. 'That thing you put together."



"Well,. yeah."

"Why'd you use Turbo-Basic XL? You should have used ACTION! It might have been a half-ways decent program then. I **wouldn't** program in anything less than **ACTION!".**

I asked him if he had been using **ACTION!** for very long. "Well, No, I only know Basic." He quickly changed the subject.

I thought **I'd** tell you that Keith **Ledbetter** just **released** BBS Express into the public domain. I know a **lot of members that** would love to **set up a top-notch BBS like that. Don't you** think **the** dub owes **it** *to* **the membership to have BBS Express in thelibrary right now?**

"Well— I— I guess so" I stammer. "*But where can we get it from?*"

"You're the **librarian, Bob. You're supposed** to **know these** things."

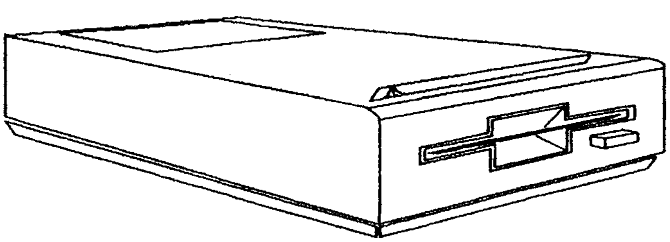
Finally. to my **great relief, Craig** got up to leave. And as he did, he looked at my desk. wrinkled his nose and said "Ale those club disks sitting out like that? The dust in **here** is going to ruin them. I keep all my disks **in—"**

"Good-bye, Craig!!!!"

This **article** is dedicated to all the disk librarians out there, and to all the people who **WERE** librarians— and to all the people who WILL BE librarians.

To the SAGE librarians, **AND** Atari **librarians** all over the country. AND to COMMODORE, APPLE, IBM, TANDY. etc. **etc.etc.** club librarians around the world—

THANKS – WE APPRECIATE YOU!!!!!!



New User Column

This column is devoted to the new user. We hope that it might answer **some** nagging questions that were not answered by the **owners** manual. First the question. followed by a simple (we hope) **answer.**

Q. Can a double sided drive read a single-sided disk?

A. Yes. You can usually tell if you have a **single-sided** disk by clicking on "FILE" and then on information. If the bytes remaining plus the bytes available add up to around **350.000** bytes. it is a single-sided disk. If the bytes add up to **over 700.000.** then the disk is double-sided.

Q. Can a single-sided drive read a double sided disk?

A. No. But if you have **a new** 1040 or **520.** then you have a double sided **drive.**

Q. I hear a lot about viruses. What are they?

A. Viruses are programs that get into your system without you knowing it. Most times they become only a annoyance, crashing programs here and there. On the other hand, they can cause severe problems if you have a hard drive, and can even cause the entire drive to crash. There are several public domain programs that can detect a virus on your disks, and most can "kill" the virus program.

Q. It is a pain in the butt to always try to change my mouse with my joystick. Is there anything I *can* do to stop this hassle?

A There are joystick extension cords that plug into the mouse and joystick ports. These ate around 6 inches long. and after being installed, hand in front of the mouse port area. making exchanges quick and easy.

Q. What is a ramdisk?

A. A **ramdisk** allocates memory from **your** computer and **creates** a "fake" floppy disk. After creating a **ramdisk,** you can use it exactly **like** another disk drive. The only problem is, when you reset **or turn** the computer off. the **ramdisk** goes with it. ***So*** be sure to save what your working on to a teal floppy disk before turning off your computer.

Q. Sounds good. but how do I create one?

A There ate literally hundreds of different **ramdisk** programs for the ST and **Megas.** Most of them are public domain. so **don't** buy one unless you have some special need. A good **ramdisk** allows the **user** to allocate as much available

memory to the ramdisk as you want.

Q. You talk a lot about "public domain". What are public domain programs?

A. A public domain program is a program that is free to use. and is in the "public domain". There is no cost for public domain programs, and most users find them on BBS systems. There are thousands of public domain programs. and many are even better than some commercial programs.

Q. Ok, how do I get good public domain programs?

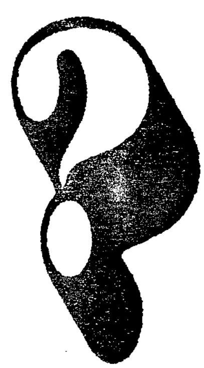
A. There are several ways: Most good computer dealers will have a large selection of them, and you probably got a few when you bought your computer. There are also businesses that sell public domain disks. Sell free programs you ask? Well. the advantage of this is that the programs are there for you, and you don't have to go looking for them, wasting time by possibly getting the wrong program. Our club librarian. Norm Bates. has his own business. PatNor Enterprises, that sells public domain disks.

Q. What is DTP?

A. DTP is short for Desktop Publishing. DTP programs are used to create such things as newsletters(you are reading the product of a DTP program), flyers. etc.

Q. 1 heard you can run IBM software on the ST and Megas. How?

A. Well, don't go sticking your IBM programs into the ST just yet. The trick is, you have to a special program to do this. The program is called "PC Ditto", and does in fact. turn your ST into a PC. The company that makes the program is called Avante-Garde Systems. This company just recently released a hardware version of Ditto called PC DITTO II. It plugs intc your cartridge port on the ST and Mega.



The NewsRoom

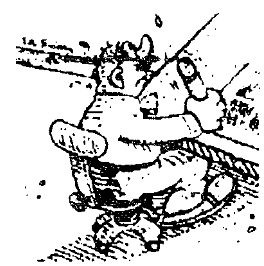
by Springboard Software Inc. For the Atari 8Bits

by Ted Beauchamp (TAG)

The NewsRoom is a desktop publishing program for the Atari 8bits with at least 64K and a 1050 compatible drive. The package consists of a main program disk and one clip art disk with over 600 different pieces of clip art.

The manual is 97 pages long including the 10 pages that show all the different pieces of art. This makes it very handy to find an appropriate picture to use. The pictures are grouped by subject into panels that have several different pictures to choose from. I think you could find a picture for almost any subject or occasion. but if you cannot there are other clip art disks available.

Enough about the clip art; after all this is supposed to be a publishing program. The main menu has five choices to pick from: the banner department. the copy desk. the photo lab, the press room. and the layout area. It seems that the programer wanted to give you a feel of the workings of a real newspaper.



The program is almost a simulation of a newspaper's creation from start to finish. As you write your story and create your pictures, they are divided into panels. An 8-1/2 X 11 Sheet will have a banner across the top and two columns of three panels or just two columns of four panels. As you save each panel, you should note the final order you want each to appear on your sheet or your story will be scattered all over the place. This does offer the advantage of inserting pictures or diagrams where you want them or of continuing stories on later pages if you are creating a multi-page paper.

The banner is the top portion of the page where the name of your paper will appear. To create this, you pick the clip

art icon from the sub menu, find the name of the page you want from the directory **displayed** and pick **the** picture you want off the page. Then you position it on the banner layout and **alter** it if you want to using the crayon icon. This will put you into what is called the Graphic **Art** Tools menu. You can create your own picture, alter an existing one, fill **areas**, draw lines, circles, and boxes using different pen styles and erase any goofs.

A B C D E F G H

The next step is to add the text using one of several fonts and sizes available. The banner is then saved to disk to be called back later. The photo lab operation is similar in use to the banner section except that you can create photos of any size up to a full panel large by making a box around the photo as large as you need. You can add a caption to the photo and use the same Graphics Tools to alter or create art work. When finished the photo must be saved to disk to be called back later at the layout desk.

The copy desk is where you write your stories. This is where I had the most problems. The text editor is not very good. You must first select a font, then you start to type, if you want to move the cursor it is done with the joystick before typing or the arrow keys after starting to type. The problem is that the movement is too fast and erratic to allow for easy editing.

If the cursor is moved outside of the text. it changes to the pick up icon and moves more than one text line at a time. Moving it back into the text causes it to jump several lines up or over making it necessary to bring it back. The DELETE key does not work unless you hold down the SHIFT key, but the manual does not tell you this.

There does not appear to be a way to type over text, the old text moves down and must be deleted later. There is supposed to be a way to move, copy, and delete blocks of text, but it does not work as described in the manual. Text can be copied to the end of the existing text, but when I tried to copy a line of text to a different location, it would only go to the end of the old text.

As you type, the text is fitted around any photos that are already on the panel. If you do like the results you can move the photo and the text will reposition itself to fit the new panel layout. You must be careful doing this however, because if the text you had entered will not fit it is dumped into a buffer.



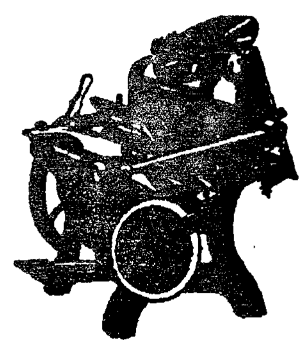
If this happens, you can put the photo back where it was or try a different position.

You may find it necessary to retype some of the missing text because there does not appear to be a way to retrieve the buffer contents. You should also be careful not to overfill the panel you are in because any overflow will be lost. You must save each panel before starting a new panel.

The next area is the layout area. This is where you reassemble the panels into their final position. This is a fairly simple task provided you remember the names and order of the panels you want to use. You can save the page for printing later, and you can save the page format for use next time also.

The last area is the Press room. The menu gives you a long list of printer configurations that you choose from and then you give the name of the page that you want printed and PRESTO there it is.

In closing. I give the program's clip art disk a very high rating, but the drawing and text editor a low rating. The ease of use is not very good and the division of the program into different tasks is okay as a **study** into newspaper publishing but just makes using the program more difficult. The manual is good but not great. Overall Rating (**Standard.** 1-10 Scale) = 7



Bit Byter News From News Letter On Disk # 19

Translated by Horst A. Dewitz

International Cortespondent for ABBUC e.V., OL Hackers & LIAUG.

Hello Bit Byter.

The annual meeting will be over by the time you read this newsletter. May be there are changes in the leadership after the votes are in. Official results will be published in our "Sondermagazin # 6", due in December.

SONDERMAGAZIN # 6 AND THIS YEARS BONUS DISK:

Together with the sondermagazin # 6 you will receive a bonus disk. Because of ABBUC's good financial management is it possible to retutn to you a portion of your dues in form of a bonus disk. The two sides bonus disk contains a game. more I will not reveal. Any of you that have not paid their membership dues, do hurry to pay up ot you will be left out.

CORRECTION:

Sorry to tell you that we committed an error on disk # 18. The program FILM.COM could not be started frcm DOS 2.5. When we compiled disk # 18 we tested our programs with BIBO-DOS. We received many questions and complaints. We are sorry and apologize and hope to avoid future mistakes. Here is the solution:

1) From DOS 2.5 load FILM.COM with function "L"

2)Use function "M" and give starting address 600

3)Press START

The program should run now.

MISH AP:

As we gathered from many angry letters the program DISKHELP.COM obviously was a pirated copy of the original SECTORCOPY 1 program, unknown to us or it would not have been included in our magazine. We regretfully apologize to the unknown author of that program.

NEW 130 XE:

We have news from the USA that Atari has a new modified version of the 130 XE on the market.

Here are the details:

a) The memory test tests the extra 64k, shown as 4 squares.

b) The first 48k are tested twice as fast as in the past.

c) Keyboard test does not show F1 to F4 keys.

dl Copyright 1983 Atari is being exchanged for Copyright 1985 Atari and is displayed at the end of the keyboard test.

el The operating system is on a 27256 EPROM chip and takes only half the memory space of that chip. In the past 16k x 8 ROM (27128) chips were needed.

f) 4 chips of the 41464 series replace the 16 RAM's (4164).

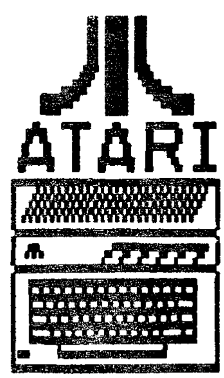
g) There is a new PIA (68B21) chip. compatible with the 6520/6520A chips of the existing computers.

h) The manual (Rev. Dl is not spiral bound any more.

Commentary of a US club: less chips more money for Atari Corp..

MAGAZINES:

First Atari magazine (German-HAD.) and now ANA-LOGm.As one could read in the September issue - Analog will be incorporated into ST-LOG. how much the 8-Bit portion will be. can only be imagined.



MAILBOX:

Our mailbox just registered the 7000 call. Sorry to tell you that I still have not been able to connect our harddrive, but I promise to do so soon.

CONTESTS:

After several 2nd place positions. Stephan Pollok was the 1st place winner in the title pic contest this time. He received KY AN Pascal as prize. 2nd place winner was Martin Koenig and 3rd place went to Christoph Ratzka.

For the creative among you: the prize for the best title pic for the jubilee issue of disk # 20 will be the ROM-FLOPPY from the firm of David/Peters, there will be 2nd and 3rd prizes also.

Super prizes for contest winners for magazine # 20 are:

1st price - Color monitor

2nd prize - Printer

3rd prize - ROM-FLOPPY

(All brand new of course!)

We are looking lor DEMO programs. You must confirm in writing that you did your own programing.

DEMOS should have graphics and sound and must run under DOS 2.5. They should show the following: reference to ABBUC. 20th jubilee. ABBUC's services, as well as ABBUC's full address. Program language of your choice. A simple pic is not enough. Last submission date January 15th 1990.

Lots of fun with this magazine

Wolfgang.

SuperBase Professional

by SysOP*Dave Gtoves, CIS 76703.4223

It has finally arrived! A full GEM implementation of relational database management in a form that is usable without prior programming knowledge or the need to learn a new language! A GEM implementation that allows you to do virtually everything by mouse control. yet also gives you full keyboard control and a powerful data management programming language that is syntactically a look-a-like for most of the common BASIC programming languages! A GEM implementation that allows you to define major macros under your Function Keys such that a single keypress will allow you to select and compare data from multiple data files and present the results on screen.

It is here and for the HD User who will get the most out of it, it is not (in spite of what the manual says) copy protected! We are talking version 2.03 software, thoroughly tested and bug-free, from a major British producer. with parallel production in use on both Amiga and MS-DOS machines. For its maiden voyage on my system. 1 used it to catalog and index a 4200 record. 12 field. 700 bytes pet record listing of CIS Atari Forum files, and it performed like a champ!

Nobody has yet proposed a good "benchmark" series for ST Data Rase Management programs, so I am not able to present any meaningful comparisons for speed in use, though it is as Iast or faster than any other system I have seen to date. The beauty here is that in setting up "filters" (formulae to select which records to operate on in a group of records) the formuiae can be input by mouse. This makes printing reports and finding data by odd groupings super easy, and readily do-able without heavyduty program writing. In two weeks of use. I have scarcely scratched the surface of the power of this package.

If you have a major database interest. SuperBase Professional is THE database management system of choice on the ST. It allows direct conversion of DB 11 through DB III+ MS-DOS *.DBF files into *.SBF (SuperBase) files. though dBMan and other ST db manager files will have to be converted to ascii delimited files and imported. (A very simple task in most cases).

If you are not a "numbers cruncher" like me, you will still find that SuperBase is worth its weight in platinum. It allows you to display "External" files. What's an External file? Oh. how about a *.IMG GDOS picture or a *.PC1 DEGAS Elite

picture, associated with descriptive data and other information? Or some generic text files. This is power. With its G W S implementation supplemented with **G+PLUS** from **CodeHead**, you have as close to a desktop publishing **operation** as any database ought to get. In addition, the Forms Editor of **SuperBase** allows you to build input screens that make the old Haba Checkwriter screens look wimpy (remember, you can play with fonts and type styles availableunder GDOS as well as with colors and patterns. and a hod of lines, boxes, and **areas)**.

Couple all the facilities together and you have a 4th or 5th generation database system of outstanding quality. It has mail merge functions forms printing capacity. and will output metafiles. Indeed, the ONLY weakness I have found in the entire system is the **onboard** text editor. The way everything else in the package works, I expected a full-fledged word **processor!**

Precision points out, very carefully. in the manuals that the test **editor** is precisely and only that. It is a decent text editor. 'ala an early **EMACs**, and performs the function adequately. I give **SuperBase** Top Rating for any relational database system on any computer today.

SuperBase is provided as a 4 disk set with 2 spiral bound manuals in a hardshell stand-alone case. Manual 1 covers the basic database **operations**, the text editor and a tutorial. Manual 2 covers the forms editor and programming language. The manuals ate well edited and well **indexed.** They ate clear. concise. yet comprehensive. The **four** disks include a Program disk. Forms editor disk, Data Disk (with helpful examples **galore)**, and a GDOS System disk.

The Suggested Retail Price is **$299.95.** For Information, Contact: **SuperBase** Professional, Precision Incorporated, 8404 Sterling Street, Suite **A**, Irving, TX 75063 **(214)** 929-4888.



Turbo-Info #1

An Introduction to the Turbo-816

by **Chuck Steinman (DataQue)**

Welcome to the introductory article in a series which will present the Turbo-816 from **DataQue Software.** Initially, the features of the product will be presented, and later the series will progress to actual applications and **programming** hints. If you have any comments or criticisms, I would appreciate it greatly if you would write a note to the editor of this fine magazine and express your thoughts.

For those of you not familiar with the Turbo-816, it is a hardware and firmware upgrade for the Atari XL and XE computers that expands the capability of those machines. while still maintaining compatibility with your existing software and hardware investment. There will also be a version **for** the original 800, although no release date has **been set** at this time. The XUXE kit is called the Turbo-816~and will sell lor $120 plus $4.00 S&H within the US. Foreign destinations, COD and other **special** handling would be extra.



The main component **of** the T816 (short for Turbo-816) is the CPU adapter board For those of you unfamiliar with computer jargon, **CPU** stands for Central Processing Unit, which is the main "brain" of your computer. The CPU that came in your XUXE computer is an **8bit** 6502. The actual CPU **in** the Atari XUXE computers is a slightly modified version of the 6502.

The T816 adapter board. along with a short ribbon cable, replaces your existing 6502 CPU with a new, more powerful **16bit** CPU. This new **CPU** has the unique capability of also being able to understand the **8bit** 6502 CPU instructions. That allows the adapter board to dill execute your original **8bit** programs.

The CPU adapter board is approximately 5 inches by 2-112

Continued on page 11...

Liaug 1990 Meeting Dates

Jan 6	July 7
Feb 3	Aug 4
Mar 3	Sept 8
Apr 7	Oct 6
May5	Nov 3
June 2	Dec 1

ANNOUNCING

☆ 8bit Public Domain Disks

Please see our new 8-bit librarian, George Leek. for the latest listing of PD disks. We are constantly adding new items to the library.

News

☆ 16 bit Public Domain and Shareware software

- **Uniterm V 2.0E CN #422**

Terminal Emulator with Kermit implementation. Ask for disk #67

- **Norad CN 370**

Program to display nearly 100 satellites as they fly over your house - real data in real time. Ask for disk #66

- **CNV2GIF.ARC**

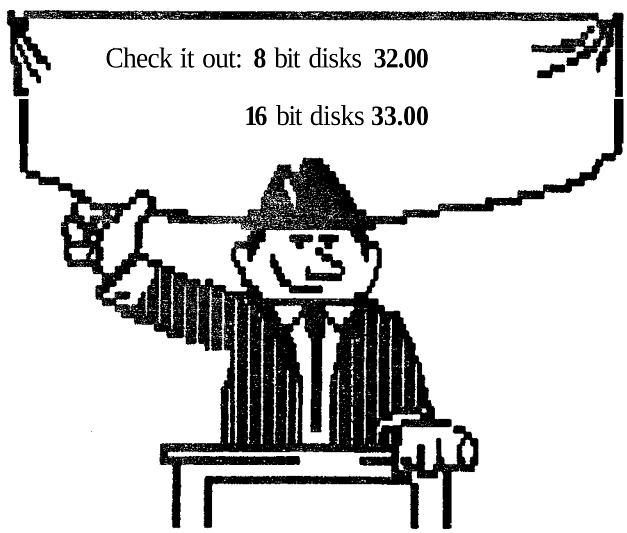
Converts color Degas and Neo pictures to GIF. Ask for disk #60

- **Mystic.Arc**

Disk Formatter that works in the background while you continue to play a game, use a word processor or spreadsheet. Ask for disk #61

- **Pearle2.Arc**

Ray tracing program that generates a three-d world of reflecting spheres. Ask for disk #52



inches. and it takes care of all timing and control functions, allowing it to fully emulate (or function like) the special Atari version of the 6502 while also extending the addressing range. One jumper must be added to your Atari **XL/XE** motherboard to make the system work. Installation and modification information is provided as part of the Turbo-816 kit.

The other component of the Turbo-816 system is the Turbo-OS ROM. This part is a 28-pin integrated chip that holds the initialization and control software that most users take for granted. Originally, I had planned on this chip fully replacing the Atari OS and just adding any new functions required by the new CPU to allow it to work properly. It wasn't long before I ran into a snag.

Atari would not release the source code for the XUXE Operating System ROM to me. I offered to sign any non-disclosures and pay any required fees, but the best offer they could come up with **was$1000** up front. and 50 cents per unit sold, for the right to copy only certain sections of the Atari Operating System ROM, but no source code was to **be** included in that agreement.

I was not impressed with their support, so I proceeded to write the entire Turbo-OS from scratch. This not only cost several additional months of programming effort, but also increased the amount of time to test each and every function.The **resulting** Operating System is **100%** compatible with software that uses the published, legal entry points into the Atari OS and legal **RAM** locations. Because of many programs making illegal calls to the OS or using reserved **RAM.** I suggest that BOTH the Atari OS and the Turbo-OS be installed in your machine and a toggle switch be used to select which is active. Details on how to make this modification are also included in the kit.

A popular misconception about the upgrade is that it will execute ST **and/or IBM/PC** programs. It will not. I have



never advertised or claimed it would. so I can only guess someone that was not familiar with assembly code. or the internal workings of computers, started this rumor. The ST uses a 68000 processor. and the IBM uses an 80x86-based processor. The **65816** is not software compatible with either of those **CPUs**, and neither of those CPUs can directly understand 6502 code. If someone wants to write such an emulator for either of those CPUs. let me know when you have it **done!**

The Turbo-816 uses the **WD65C816P5** CPU, which was designed by Western Design Center and is manufactured by California Microsystems. This is the same CPU used in the Apple **Igs.** Anyone familiar with the **Igs** knows it is a powerful little machine, although it does have a few design problems that prevent it from being able to fully take advantage of the CPU.

Many Atari owners have asked me, "What will this do for me?" There are many ways to answer that question depending on what you use your computer for and whether you program. The Turbo-816 not only adds **16bit** working registers, but also new, more powerful instructions and a **24bit** address bus. Now, with these new capabilities, more powerful new programs can **be** written to allow the Atari computers to compete again with the more expensive **16bit** computers. The new addressing capability allows for up to 16 megabyte of memory (RAM), and the new instructions make smaller, faster, and more complex routines possible.

I have made MAC165 Macros and other information available to all registered owners via my BBS and the **GEnie** telecommunicationsservice. allowing owners of **MAC/65**, or any other macro assembler, to begin using the new 65816 instructions immediately.

To the non-programmer. at this time there are no programs which take full advantage of the Turbo-816. Current applications will run from 5% to over **300%** faster depending on how much they use the Turbo-OS. Since existing software was not written to accessthe new memory or take advantage of the new instructions, that software can only gain performance by calls to the **Turbo-OS.**

I will have several new applications which will take advantage of the new memory and power, though. The first of these will **be** a spreadsheet program called the **Turbo-S16.** It will **be** similar to **VisiCalc** and **SynCalc.** The program will determine if a Turbo-816 and **Turbo-OS** are available, and then use any expanded or explicit memory. if available. Otherwise, it will run on a stock Atari **400/800/XL/XE** using the normal RAM. Since it is not initially going to **be** designed as a concurrent application (**i.e.**, it will not multi-task), the program will absorb all available **RAM** for its use. That

means, if there is one megabyte of explicit or expanded memory available. the program **will** allow you to use up to that amount for the application. I plan on **releasing** this program in ROM, which will be, to my knowledge, the **first** spreadsheet program to **be** implemented in ROM for the Atari. A discount will **be** available (with proof of purchase) to owners of **SynCalc, SynCalc+** and **VisiCalc** as an incentive to upgrade to the Turbo-S16. **Details** will **be** released later.

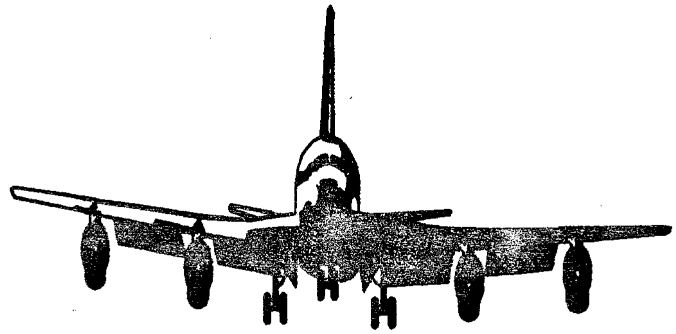
Another application nearing completion is the Turbo-A16. This is an assembler that will allow you to assemble native mode 65816 code. I am trying to incorporate enough versatility to allow loading of source code from popular file formats. That will allow people to use their existing libraries without first having to convert them. It has not been decided whether this application will be in ROM or disk based.

Well, that's the basics of the Turbo-816. If you have any specific questions you would like **answered**, please forward them to the Editor of AIM, and I will see that you get an answer. For those of you with **GEnie** accounts, I have a special section dedicated for Turbo-816 questions and answers, so feel free to drop **in!**

White Elephant Sale

Bring your unneeded software and/or hardware to the July meeting. It is quite possible that you will find a member who can use your excess gear.

Remember that we do not condone piracy



LIAUG Minutes of 4/7/90

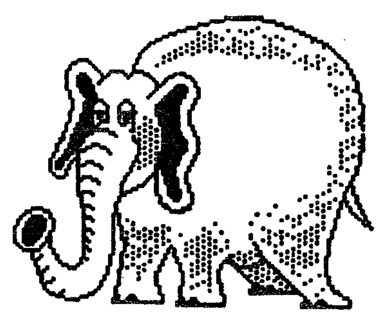
The meeting opened at 1240 p.m. when John Aalto reported that Terry's BBS (**STarSCAN**) was now up and running. It is currently open from **10:00** p.m. to 12 noon on (516) 399-4252, and will be online 24 hours daily from May 24, 1990. John also reported that Terry had demonstrated some of his disks to members of the Custer Institute, (mainly IBM users) who were astonished at the graphics.

Various members reported on stores selling Atari machines and on programs that come with faults.

John remided us that May is our sixth anniversary. A discussion followed on how to get our logo on disks. Tom Alvarez offered to screenprint T-shirts with the logo.

In discussing ways to become better known to the public. Harvey Schoen produced ST Informer - a monthly newsletter. John suggested a photo in Suffolk Life, which was overbid by a suggestion for video clips on TV Channel 12.

Pat **Mulvey** reported on the BBS contest for which 4 winners were named: Geotge Leek, Frank Kusloski, Anthony Shawy and Tom **Dirkman.** Pat also reported that he had demo'd Tetrus for the **8-bit** group at Riverhead and would be



demoing PC-Ditto **II** for May. He also reported that he has **10** megs up and operable on the BBS. He is now aiming **for 30** megs while a repair cost of **$150** will **be** shared with LIAUG. He alto **reported** that **DOS-XE** is now public domain and available directly from Atari.

Threre will be a doorprize at the May meeting.

Further **notes:** Jack Tramiel is back in the hot seat - the Atari Explorer staff has been sacked. A suggestion was made (was it facetious?) that Donald Trump should take over Atari.

The Book Revue Annex. behind the Pancho Villa restaurent at **35B** Gerard in Huntington **(516-385-1358)** off the north end of New York Avenue. has Atari books for sale **C-H-E-A-P.**

John declared a lunch break at **1:30** p.m. and the meeting resumed at **230** with Harvey demonstrating Alien Blockade; Pat - Fortress and the **Textpro** update; Frank Kusloski brought in **Design** Lab to demo on the &bit and **John** Aalto had Battle Chess to demo on the 16-bit. Harvey demo'd **Fleet** Street Publisher v **3.0.**

The meeting then degenerated into conversational groups at about **3:30.** The fact that the secretary was overcome by tiredness was due solely to the fact that her workplace **was** burnt out the previous morning and not to the quality of the demonstrations.

Computer User Spouse Strikes!

by Robert **Hodson** (ST of **El Paso)**

After reading **"NeoSTAG** struck by Virus" in AIM magazine. September **1989.** it **occurred** to me that there is a virus out there that has struck all avid users.

Symptoms

Hearing the parts of sentences. such **as...married** to that **computer...speaking** to the **wall...last** time **I'm** calling you—and many, many **more.**

Seeing a hand on the power switch after hours of work and hearing "SAVE IT or LOSE IT."

Telling your spouse that you will only **be** gone to the computer storelfriend's house one or two hours and ending up gone for four or more.

It seems that if you're branded as a computer enthusiast you will eventually be bitten with this sleeper. At first. I tried desperately to find some kind of immunization for it.

Cures

Posting the following sign above my workstation worked for 48 hours only. This virus has no quick cure.

REMEMBER COMPUTERS ARE NOT WARM, LOVING, OR UNDERSTANDING. ONLY YOUR WIFE IS THERE **FOREVER!**

After which, I would sense a presence akin to the grim reaper pointing to the sign.

Instantly save, shut down and say "Yes Honey. what do you **need?"...knowing** that this time you did not even hew **part** of a sentence.

Next came getting up early Saturday and Sunday mornings, closing the bedroom door and putting a box over the printer (if absolutely needed).

One other short-time remedy is to have your spouse take a trip home to mother while you're attending a school — any school will do. This **will** be the only time you can get some kind of remission. Be forewarned, there is no permanent cure, only constant trying to work toward harmony. **Beware!**

Happy Computing



SUPER 3D PLOTTER II

By: R. Constan © 1985

★ ★ BEYOND BELIEF! ★ ★

If you have any interest in 3D computer animation and image design, get ready to watch your so-called "game machine" out-perform every 8-bit machine on the market today! SUPER 3D PLOTTER II is a complete 3D image design, display, and animation package for your Atari computer. Thanks to some new and very powerful "natural" algorithms developed by Elfin Magic, detailed hi-res images can be rotated and maneuvered at an amazing projection rate of 3 to 6 screens per second! This is the kind of animation that was considered impossible for an Atari. Believe it!! THIS PROGRAM ALLOWS MORE REAL TIME CONTROL THAN *ANY* CURRENTLY AVAILABLE 3D SYSTEM FOR ANY 8 BIT MACHINE. SUPER 3D PLOTTER II also contains two full-featured, memory-resident editors: Enter your images via numeric data, or right on the screen with a joystick! Here are just *some* of the truly amazing features of this package.

- UNSURPASSED 3D PROJECTION SPEED
- TRUE HIDDEN SURFACE ELIMINATION AND SOLID (COLOR-FILL) PROJECTION.
- SUPER HI-RES PRINTOUT TURNS YOUR DOT-MATRIX PRINTER INTO A PEN PLOTTER!
- PRICE: ONLY **$29.95**
  N.Y. RESIDENTS ADD SALES TAX
- 2 EXTENSIVE EDITORS, PACKED WITH UTILITIES, FOR ULTIMATE DESIGN FLEXIBILITY.
- EASY DISK FILE SAVING, LOADING AND *MERGING* OF IMAGES.
- SCREEN "OVERLAY" AND "SAVE" FEATURES FOR INFINITE IMAGE EXTENSION, AND TOTAL COMPATIBILITY WITH MOST DRAWING PROGRAMS.

Don't be fooled by the low price! This package is usable in professional 3D C.A.D. applications, and this ad does not permit space for a fair description! Send S.A.S.E. for more info, or send check or money order to:

Elfin Magic

23 Brook Place, E. Islip, NY 11730



FOR ALL 8-BIT ATARI COMPUTERS
WITH 48K AND DISK DRIVE.
PRINTER OPTIONAL

—SOFTWARE WITH IMAGINATION—

CIRCUIT DATABASE II

This is an enhanced version of the electronic circuit (SCHEMATIC) drawing program I presented in the Nov. 1984 issue of **ANALOG Computing**. This program allows easy design and editing of electronic circuits, and storage of up to 60 complete, labeled diagrams on a single side of a disk! This new version includes several added circuit symbols, plus a special "TEXT TO HI-RES" converter, which produces neat, *vertical* printouts on *any* dot-matrix graphics printer having a vertical printhead. The editor is so friendly, you can almost draw your circuits on screen faster than you could scribble them out with pencil and paper. And, it's written in plain, listable Atari BASIC, with full documentation on all machine language routines (USR calls), so you can use them in your own programs. CIRCUIT DATABASE II is a must for anyone concerned with the electronics field, from weekend hobbyist to professional. In fact, in today's world of fast-moving technology, it is almost unthinkable that you (or your children) will never be exposed to electronic circuits in some form. Now, you can be ready—and at a price you can't resist.

ONLY **$12.95!** OR SEND S.A.S.E. FOR MORE INFO AND SAMPLE PRINTOUTS!

LONG ISLAND ATARI USER GROUP

The Long Island ATARI Users Group

MEMBERSHIP APPLICATION

To apply for LIAUG membership fill out the following application and bring it to the next meeting, or mail it (including check or money order) to:

The Long Island ATARI User Group
P.O. Box 92
Islip, New York 11751

The current dues are $20 yearly and include our newsletter. Make checks payable to Randy Constan.

First name: ______________________ Last name: ______________________

Address ______________________

City ______________________ State: ______ Zip: ______

Phone # ______________________

Your system (please be specific):

Computer: 400 600 800 800XL 66 130 520 1040 MEGA

Memory: ______ K - Cassette: ______ Disk drives ______

Modem ______ Interface: ______ Printer: ______

Other: ______________________

What languages are you familiar with? ______________________

____

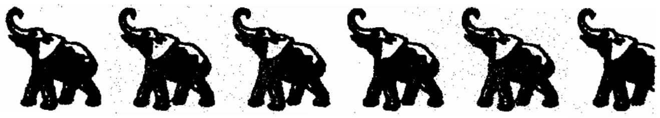
In what areas would you like to learn more about your computer system? ______________________

____

For LIAUG use only: Rec'd ___/___ ___ Amt: ______ Dx ___/___/___ TYL: ___/___/___ Card Y/N ML Y/N Mail / BBS / Meet







We have planned a White Elephant day for our next meeting. Bring your surplus hardware and/or software and possibly it will interest another member. Remember that all software must be original disks with the documentation. The next meeting is July 7, 1990.

The LIAUG Lighthouse
P.O. Box 92
Islip, NY 11751

First Class Mail